

D. Weizenicker-8

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Madison, Wisconsin

ITEM RECOMMENDED FOR NATURAL RESOURCES BOARD AGENDA

TO THE SECRETARY: L. P. Voigt

Date June 9, 1975

FROM: D. L. Weizenicker

SUBJECT: Approval of final master plan for Natural Bridge State Park, Sauk County.

1. To be presented at June Board meeting by Dave Weizenicker.

2. Appearances requested by the public:

Name

Representing whom?

3. Reference materials to be used: Master plan and map.

4. Summary: The Department has completed a master plan for the 530-acre Natural Bridge State Park located in Sauk County. The development concept is to provide for day-use only with minimal public facilities to safeguard the natural features of the park.

The environmental impact assessment supports the Department's recommendations and is compatible with the master plan.

5. Recommendation: That the Board approve the master plan for Natural Bridge State Park.

APPROVED:

S. W. Welsh 6/10/75
Mr. Welsh Administrator Date

DM

[Signature] 6/10
Mr. Mackie ~~Administrator~~ Date
Secretary L. P. Voigt Date

Signed:

[Signature]
D. L. Weizenicker, Acting Director
Bureau of Parks & Recreation

- cc: Miss Korn - 14
- A. E. Ehly - So. Dist.
- C. Enerson - Dodgeville
- J. L. Treichel - 8

Department of Natural Resources

INTRA-DEPARTMENT

MEMORANDUM

Madison

Station

Date June 9, 1975

IN REPLY REFER TO: 2510

TO: L. P. Voigt - 14

FROM: D. L. Weizenicker

SUBJECT: Natural Bridge State Park - Approval of Master Plan

Board approval is requested for the Natural Bridge State Park master plan.

Historical Significance - The area has long been recognized as an extremely valuable site from its geological, archeological and historical significance.

This unique natural phenomenon was created by wind erosion thousands of years ago. Its top is 40 feet above the ground, while the actual opening beneath the bridge is 35 feet wide and 25 feet high. It is the largest natural bridge in Wisconsin and one of the largest in the entire Middle West. It is one of the rare beauties of nature which lasted through the centuries because it lies in the Great Driftless Area untouched by the Glacier.

Below the bridge is an ancient rock shelter. In 1954 Anthropologist Warren L. Wittry of the State Historical Society, while digging at the shelter, discovered antler-scrappers and other artifacts dating back to between 6,000 and 7,000 years ago.

The adjacent woodlands, cliffs and small prairie remnants contain a wide variety of plant communities and outstanding scenery.

Previous Board Action - The historical park was established November 9, 1972 with an acreage goal of 530 acres. State ownership presently consists of 530 acres, with 400 acres wooded. At the time Board members expressed the intent that only wilderness camping be permitted and that the Department determine whether any development should occur northwest of the highway (general location of the historical and natural features) or whether it should be confined southeast of the highway (relatively open agricultural use land). Subsequently, engineering studies have determined that the area southeast of the highway has severe drainage problems and is for all practical purposes, undevelopable. The drainage problems also preclude construction and use of a pedestrian underpass across County Trunk Highway "C".

In reference to camping, wilderness-type camping is not being recommended in order to minimize visitor impact in and around the rock shelter and designated scientific area. The master planning process supports day-use only activities as opposed to camping of any kind. The nearby Devil's Lake State Park and private facilities in the area are adequate to fulfill camping demands.

Park Mission and Proposed Action - Development will be kept minimal with emphasis placed on nature study, education and aesthetic appreciation. The Rock Bridge and an adjoining 60 acres were designated as a scientific area, in April 1973, thereby further ensuring its protection and preservation.

Public Input - A public informational meeting to discuss planning and establishment of the Natural Bridge State Park was held by the Department, January 23, 1973, at the Denzer town hall.

Proposed Development - The proposed development, consisting of a 30-car parking lot, small office/exhibit building, picnic area with vault toilet and drinking water, small metal service building and all necessary utilities will be constructed north of County Trunk "C".

Development completed and proposed items with cost estimates are as follows:

Development to date (trail work)	\$ 7,585
Future Work:	
Trail Construction	1,000
Road and Parking Lot (30-car)	22,000
Well with Hand Pump	3,500
Toilet, 8-unit combination vault type	15,000
Office/Exhibit Building	10,000
Metal Service Building	4,000
Utilities	1,000
Landscaping, signs, tables, grills, etc.	<u>8,500</u>
TOTAL	\$72,585

Five and one-half acres will be devoted to intensive park development which includes the parking lot, picnic area, entrance road and building sites. This calculates to about 1% of the total park acreage of 530 acres under intensive public use and the remainder to be preserved in its natural condition.

Operations Costs - Anticipated costs are estimated to be approximately \$10,000 annually.

Management - The Devil's Lake State Park work unit manager will be responsible for the management of Natural Bridge.

Environmental Impact Assessment - An environmental impact assessment has been prepared concerning the proposed course of action. The assessment supports the recommendations and is compatible with the proposed master plan.

Recommendation - We recommend that the Board approve the master plan for Natural Bridge State Park which will guide its development for approximately a 10-year period.

J. Weizenicker
D. L. Weizenicker

DJK:cls

- cc: Miss Korn - 14
- A. E. Ehly - So. Dist.
- C. Enerson - Dodgeville
- J. L. Treichel - 8

RECOMMENDED:

<u>Sww</u>	<u>6/10/75</u>
S. W. Welsh	Date

<u>DM</u>	<u>6/10/75</u>
D. J. Mackie	Date

APPROVED:

_____	_____
L. P. Voigt	Date

NATURAL BRIDGE MASTER PLAN

I. INTRODUCTION

The 530-acre Natural Bridge State Park is located in the Baraboo Hills of Sauk County, Township of Honey Creek. The park's main feature is the "natural bridge", a very scenic attraction due to its geological features and archeological significance. Below the bridge is a rock shelter which was used by Indians in ancient times. Anthropologist, Warren L. Wittry of the State Historical Society, discovered the site in 1954. Digging at the shelter revealed antler scrapers and other artifacts dating back between 6,000 and 7,000 years ago. Prehistoric people roamed the country of the natural bridge and took shelter beneath it to escape from cold and stormy weather.

Later, whites discovered the bridge and for nearly a century visitors from far and near have come to recreate and take in its scenic beauty. During the summers of the 1880's and 90's, a wood floor was erected in the glen for dances, school and church programs.

In recent times, previous to state acquisition in 1973, the property had been managed as a tourist attraction by the owners. They provided some picnicking and camping facilities, a museum and a trail to the bridge-shelter as well as to other points of interest.

Since 1973, these facilities have been abandoned and very little development has taken place on the property. A nature trail and interpretive devices have been constructed near the bridge and its environs. Railings have been incorporated with the trail to keep people on the path, to guide them on the trail and deter destruction of natural features. With the exception of this trail, no further development will occur near the natural bridge.

Use pressure is low but has been steadily increasing with 3,800 visitors in 1973 and 7,700 visitors in 1974. To accommodate the growing demands and yet preserve the property's natural beauty, it is necessary that a master plan be agreed upon and followed.

II. CONCEPTS

Goal:

To provide a public use area that will support 50,000 annual visitors who wish to view the scenic natural bridge, become educated to the geological and archeological facts of this feature and the flora and fauna of the surrounding park lands, enjoy the out of doors and yet which will preserve and protect these national features.

The objectives are:

1. Major emphasis will be placed on the preservation of the outstanding natural features yet provide an opportunity for people to enjoy the out-of-doors and become better acquainted with their natural heritage. Activities will therefore be restricted to general nature study, education and aesthetic appreciation. Park visitation will increase to a projected figure of 30,000 to 50,000 visitors annually.
2. Minimal development and maximum preservation will be stressed to insure that the bridge shelter and fragile natural features are protected in perpetuity. Day-use area development will be restricted to the 5½ acre site as shown on the Development Plan. No expansion will take place in an effort to preclude over-use and the initiation of conflicting recreational activities.
3. The bridge-rock shelter and 60 adjoining acres are under Scientific Area status thereby protecting the natural, geological and archeological features. A buffer zone including a 330-foot strip of land along the south side of the scientific area and 20 acres of woodland on the west side will further protect the area from detrimental development.
4. The bridge-rock shelter and surrounding environs will be presented and interpreted along the natural trail north of CTH "C". Railings will be incorporated with the trail at the natural bridge site to prevent illegal digging and defacing of the rock.
5. The park will be designated as day-use only. Minimal development will include parking, water and toilet facilities, picnicking and exhibit-office space. The development will occur in the valley east of the present farmyard complex. Day-use activities such as picnicking will be limited and restricted to this area well away from the bridge. The park could also serve as a point of interest for the Wisconsin Bikeway users. The 60-mile Juneau-Sauk segment which utilizes part of County Trunk Highway "PF" passes within about one mile west of the park.

No camping or overnight parking will be allowed, as the entrance road will be gated.

6. The portion of the property south of CTH "C" will be utilized as a natural area with hiking trails. It will also serve as a buffer zone to insure protection from development capitalizing on the park. Leasing of cropland south of CTH "C" will continue for a 3-5-year period. Leasing practices must assure that space is provided for trail connections between the north and south sides of CTH "C". Furthermore, row crops, such as corn, must not be planted to assure protection against excessive erosion.
7. Maintenance practices which will insure protection of the unique natural features and retain the integrity of the biotic community will be stressed. Environmental modifications will be limited to the extent required to assure preservation and to facilitate safe use. Timber harvest, plant removal and hunting will not be allowed. Introduction of exotic plants, grass mowing and herbicide use will be kept to a minimum. No camping or active recreational facilities will be developed. Vehicular traffic will be restricted to the day-use entrance road and parking lot. Only park vehicles will be allowed on the property for maintenance purposes. ATV use will not be allowed on the property. However, a narrow corridor, closely paralleling CTH "C" to the south will be provided to link snowmobile trails outside of the park.

III. DEVELOPMENT

The following goals are specific items that must be achieved to complete the development of Natural Bridge State Park. They are listed in view of the general development concepts laid down in the preceding section.

1. Day-Use Area Facilities

- a. Office-exhibit facility. A small office-exhibit building will be constructed in the day-use area. It will be used as the park manager's headquarters and exhibit area. Artifacts, photos, and other displays will describe the Woodland and Archaic inhabitants of the rock shelter. The exhibits will be removed at the end of each tourist season and stored at Devil's Lake State Park for safekeeping.

Space for a desk, files and other office needs of the manager will be provided for in the building. Park stickers and information bulletins will be sold and distributed from this facility by the park manager.

- b. Restrooms. Restroom facilities will consist of one 8-unit combination pit toilet located in the day-use area. This will serve the needs of park visitors and park personnel alike.
- c. Entrance road and parking. The asphalt entrance road and parking lot will have a controlled access point off of CTH "C". Entry and exit will be regulated by a gate to eliminate park use after closing hours. The parking lot will have room for 30 cars and two buses.
- d. Picnic facilities. Picnicking will be allowed in the day-use area. The area will be defined by split rail fence and signed to insure that food and beverages are not taken beyond the prescribed boundaries. A handpump and well for water will also be available in the picnic area.
- e. Meeting space. A central meeting space will be provided near the office-exhibit building and serve as a beginning and ending point for the trails.
- f. Landscaping. Landscaping in the day-use area will include the planting of trees and shrubs for shade and screening purposes. Only those trees which are pathologically or mechanically unsound will be removed that effect visitor safety. Any additional clearing or cutting for road work purposes will be evaluated by the park planner before final plans are approved.
- g. Entrance sign. A park entrance sign and split rail fence will be constructed to designate the entrance and define the day-use area.
- h. A small steel frame building will be erected in the day-use area for storing maintenance equipment.

2. Trails

With the exception of a closely restrained trail and interpretive devices, there will be no further development near the natural bridge. Only those trees which are rotted or storm damaged will be removed to assure visitor safety. Minimal grading is called for in developing the trail. A narrow tread, 3' to 4' wide, using crushed rock as a surface material, will be used for the trail construction. Railings will be incorporated with

the trail to keep people on the path to reduce the chance of their injury or the destruction of natural features.

Paths connecting the natural bridge trail and those south of CTH "C" will be minimally developed.

Other than the brushing and clearing needed to construct the hiking trail, no further development is planned. Minimal interpretive devices may be included if deemed appropriate.

3. Building Removal

Due to their deteriorated condition, all structures except the log building, windmill, smokehouse and tool shop will be razed. This includes the building foundations and storage shed south of CTH "C" as well as the house and other buildings north of CTH "C".

The log building, smokehouse, and windmill will remain in their present locations and serve as a point of interest along the trail system. Each structure will be signed and interpreted according to their historical significance as they relate to past farming practices.

The tool shop will be used for storing maintenance equipment until a permanent storage building is erected in the day-use area. At that time, the tool shed will be removed.

4. Development Alternatives Considered

- a. No Action. Since the State bought the property in 1973 and designated it as a state park, we are committed to developing at least minimal day use, parking and restroom facilities. No development would result in some deterioration of the resource due to the lack of properly marked and restricted trails, roads, parking area, toilet facilities and associated maintenance and policing.
- b. Enlarge Project. Since the management goal is to protect and preserve the natural bridge and its environs, intensive recreational development would jeopardize the resources contrary to the intent of the park. Primitive camping was considered but ruled out to minimize visitor impact.
- c. Reduce Project. Based on the development objectives for the park, the minimum number and size of facilities are already called for. The park could not accommodate the projected number of visitors if the facilities were further reduced.
- d. Hunting. Section 29.57 (4) of the Wisconsin Statutes prohibits small game hunting on state park lands. Deer hunting could be permitted if it was determined by the Department that damage to the resource was occurring because of an excessive deer population.

IV. LANDSCAPE MANAGEMENT

The following maintenance constraints will be undertaken to insure realization of these goals to insure a more natural park area.

1. General Park Property

- a. Grass mowing should occur only in the day-use area on a regular basis. Periodic mowing of designated open areas and property boundaries should take place to keep them open and retard shrub invasion.
- b. Private motor vehicle use will be restricted to the entrance road and day-use area parking lot.
- c. Tree and shrub planting for shade and screening objectionable views will be included in the day-use area.
- d. Only indigenous plant material will be planted on the property.
- e. Only those trees which are pathologically or mechanically unsound will be removed that effect visitor safety. Some selective cutting for creating views and vistas will be allowed.
- f. Herbicides may be used on a limited basis, for the control of noxious weeds.

- g. Trail maintenance should include thinning of brush and replacement of surfacing material as needed to provide safe unobstructed use.
- h. Prairie maintenance practices, such as burning, should be established and supervised by the Devil's Lake Park Naturalist.

2. Scientific Area

- a. Development and management practices should be limited to assure resource preservation.
- b. No plant material or artifacts should be removed.
- c. Only those trees which are pathologically or mechanically unsound will be removed that effect visitor safety.
- d. No plants or animals should be introduced into the area.
- e. No chemicals, such as herbicides, pesticides, etc., should be used in the scientific area.
- f. No intensive public use should take place. Use should be restricted to hiking and observation of natural features.
- g. There will be a minimum of interpretive signs erected in the scientific area.
- h. Only maintenance vehicles will be allowed in this area.
- i. No buildings and other improvements such as: fireplaces or picnic facilities will be constructed.

NOTE: For additional information, please see the Scientific Areas Preservation Council's recommendations on Scientific Area Management in the appendix.

V. ACQUISITION

The entire 530-acre tract of land was purchased from the Carr family on January 11, 1973 for \$218,000.00. No additional land purchase or property boundary expansion is planned.

VI. PROJECT DEVELOPMENT

Due to the limited development planned for this park, it is felt that all facilities should be constructed during the 1975-77 biennium.

The development includes:

	Development to Date = 7585
1. Trail development	\$ 1,000
2. Pavement-entrance road	10,000
3. Parking lot (30-car)	12,000
4. Well and handpump	3,500
5. Toilet (8 unit-combination)	15,000
6. Office-Exhibit facility	10,000-
7. Landscaping (entrance sign, plants, etc.)	8,500
8. Steel service building (20'x22')	4,000
9. Utilities (electricity and telephone)	1,000

65,000
 7585

 72,585 GRAND TOTAL FOR DEV

The total cost estimate for the above facilities, is \$65,000. The cost of razing the buildings will be included with other force account projects and therefore cannot be estimated at this time. Engineering and contingencies for items requiring engineering will be extra.

VII. MASTER PLAN IMPLEMENTATION

The person responsible for implementation of the Master Plan will be the Devil's Lake Work Unit Manager. The work unit includes Devil's Lake State Park and Parfrey's Glen Scientific Area.

Wisconsin Scientific Areas Preservation Council
Scientific or Natural Area Report

Name of Area Natural Bridge & Rockshelter Inspection Date September 7, 1971

Quarter SW County Sauk Twp. 10N Range 5E Sections 17

Boundaries and acreage of proposed or established area and buffer Scientific zone of 60 acres: E-3/4 N-1/2 NW-1/4 17
Buffer Zone: 40 acres W-1/2 NW-1/4 NW-1/4 17 and N-20
acres of S-1/2 NW-1/4 17.
See attached map.

Access to area In south central Sauk County 1 mile northeast of Leland on CTH C.
Follow trail north 1/4 mile from parking lot to rockshelter.

Description of area: Outstanding features, primary and secondary biotic communities, dominant understory and rare species, topography, soils, geology and archeology.

One of the outstanding features is the rockshelter of some 60 feet in width and a maximum of 30 feet in depth. In 1955 Warren Wittry partially excavated the site to a depth of 9.5 feet and concluded that it was utilized by Woodland and Archaic inhabitants. Earliest estimates of human occupation are of 8000-9000 B.C. Animal remains identified include 15 mollusk species and 50 vertebrate species (of special note - passenger pigeon, turkey, elk, wolf, bobcat, fisher, martin, mountain lion remains). The natural bridge opening is about 25 feet wide and 15 feet high, the top of which stands 35 feet above ground level. At the base of the sandstone bridge is the rockshelter. The well dissected upland is wooded with a variety of hardwoods (see attached species list) of which the oaks predominate. Of additional interest are the remnant prairie openings with Indian grass, little bluestem, grama grasses and cactus, and the cliffs which contain smooth and purple cliff-brake, slender lip fern, walking fern and cliff goldenrod.

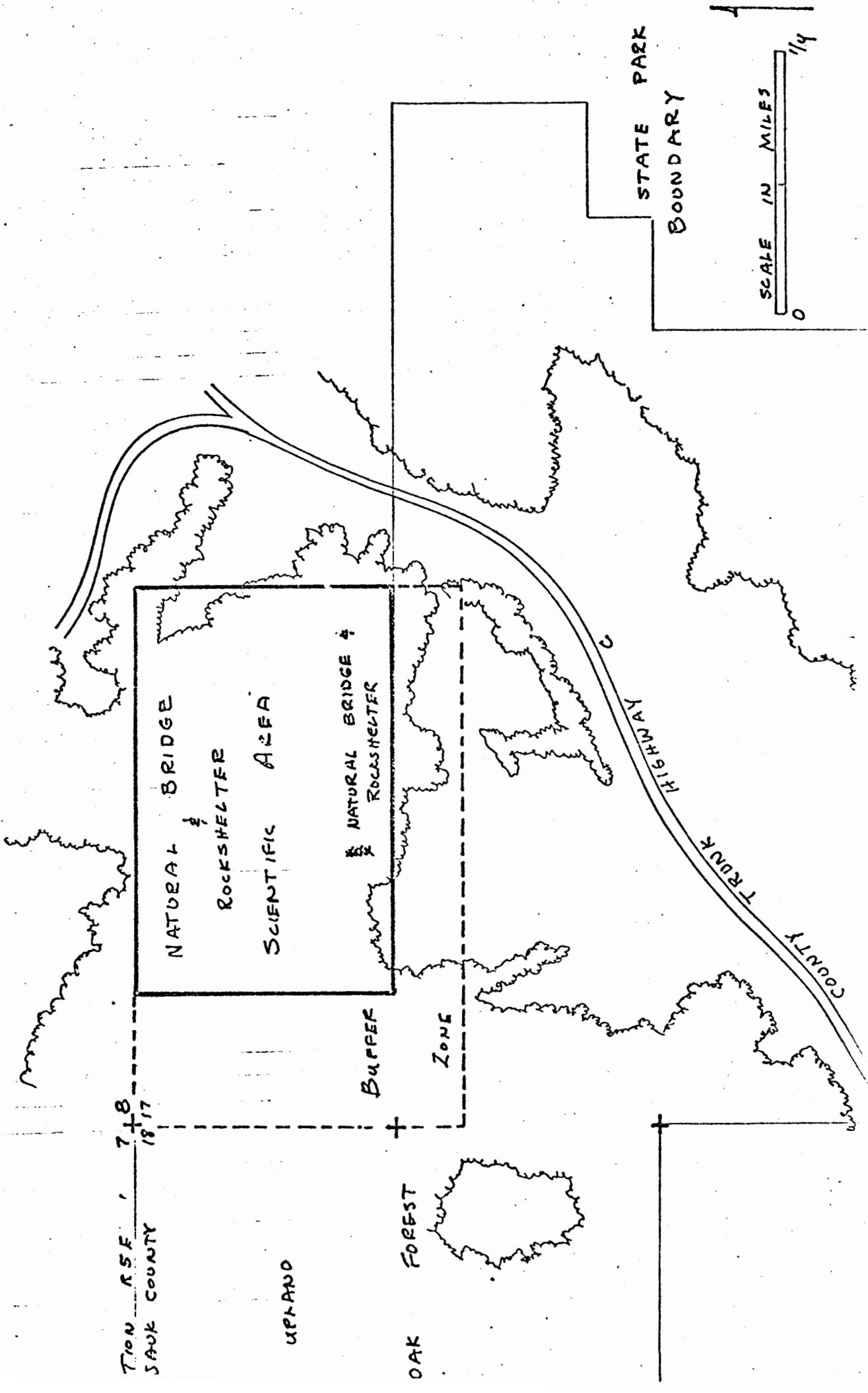
History of land use and limiting factors: Area previously maintained under private ownership (Paddatz, Carr) in a relatively natural condition except for past grazing in part of the upland oak woods.

Administrative information: Land owner and administrator, existing and proposed management, degree of scientific, educational and recreational use of area, adjacent lands and compatibility. 530 acres purchased by the DNR in 1972 to be managed as a state park with very limited development. Both the archeological and geological features have been well studied and recognized as having statewide natural area significance. The area will doubtless serve several thousand hiker-visitors annually as it did under private ownership. A certain amount of use can be expected by amateur and professional naturalists as well as natural science classes.

Reference information: person recommending area, references, quadrangle and other publications and date of action taken toward designation of area.

Recommended by Wis. Archeological Survey. See North Freedom Quadrangle, Wisconsin Archeologist (June 1959) Vol. 40. No. 2.

NATURAL BRIDGE & ROCKSHELTER SCIENTIFIC AREA



TOWN RSE 7-8
SAKK COUNTY 1817

UPLAND

OAK FOREST

BUFFER
ZONE

NATURAL BRIDGE
&
ROCKSHELTER
SCIENTIFIC AREA

NATURAL BRIDGE &
ROCKSHELTER

TRUNK
HIGHWAY
COUNTY

STATE PARK
BOUNDARY

SCALE IN MILES
0 1/4

Part I of this plan contains the Scientific Areas Preservation Council's recommended general procedures for the management of scientific areas. Some items may not apply to this scientific area. Part II contains modifications to the general procedures and specific recommendations for this area as jointly agreed to by the Council and the owners or administrators of this area. The plan will be reviewed periodically and amended as needed.

The objective of these procedures is to preserve the scientific area in a natural condition with as little disturbance as possible. Management decisions should be guided by the preceding statement when not otherwise covered in this plan.

PART I - GENERAL MANAGEMENT PROCEDURES

A. Management of the Biotic Communities

1. Removal of plants, plant parts, minerals, animals and artifacts is generally not permitted. However, hunting, fishing, trapping, berry picking and nut gathering is permitted if not expressly restricted in Part II or otherwise prohibited by law. Collecting for scientific purposes may be allowed by permission of the Scientific Areas Preservation Council.
2. Cutting of dead, down; living trees or other vegetation is to be limited to that essential to meet safety requirements along roads, trails and firebreaks. Where cutting is essential, material should be left within the scientific area.
3. Control of abnormal animal populations or control of plant succession with the use of fire, mowing or water level manipulation, may be employed to maintain a particular scientific area type, if provided for in Part II. However, no alteration of the biotic community will be initiated without the approval of both the property manager and the Council.
4. Introductions of plant and animal species, whether native or exotic is generally prohibited.
5. Herbicides, insecticides, fungicides, or other chemicals should not be used for plant or animal control. The Council shall be notified of any emergency need for exceptions to this rule.

B. Public Use

1. Intensive public use should generally not be encouraged. Any public use whether recreational or educational which damages vegetation or otherwise impairs natural conditions should be discouraged and if necessary controlled. Recreational use such as hiking and observation, and educational use which does not degrade the natural features is encouraged.
2. There should be a minimum of attention-drawing signs. A sign regarding the areas purpose and use limitations is desirable where roads or trails pass through or adjacent to frequently used scientific areas. Boundaries may be marked with suitable stakes for the convenience of the property manager and visitors.

B. Public Use (Continued)

- 3. Vehicle traffic of all types is discouraged. Existing trails and access roads may be maintained. They should be identified and located on the attached management plan map. New walking trails may be constructed where use is heavy or where needed to protect sensitive vegetation, following joint approval of the Council and the property manager.
- 4. No buildings, and other improvements such as fireplaces, picnic grounds, athletic facilities or beaches, dams or other waterway modification devices will be constructed. Any public use facility, maintenance facility or habitat modifying device essential to the scientific area should be located in a surrounding buffer zone.

PART II - SPECIFIC RECOMMENDATIONS, ADDITIONS OR EXCEPTIONS TO GENERAL PROCEDURES

Scientific Zone - Hiking trail construction and maintenance is compatible with scientific area status.

It is recommended that existing or similar barriers around the rockshelter be maintained to prevent illegal digging and defacing of the rock.

The State Archeologist noted the importance of retaining the existing archeological remains in an undisturbed condition and would not recommend excavation now or in the near future. Requests for scientific exploration should be directed to both the SAPC and Bureau of Parks and Recreation.

Remnant prairies on bluff summits and cliff edges, although small in total acreage, maintain a sufficient seed stock to extend the prairie community to adjacent lands should a prairie enhancement project be deemed feasible in the scientific area. Removal of adjacent woody vegetation is a possibility with prior Council approval. Snowmobiles and ATV's not permitted in the scientific and buffer zones.

Buffer Zone - The buffer zone is a protective strip of land 330 feet deep along the south of the scientific area and 20 acres of woodland west of the scientific area. Land use compatible with the state park is permitted with the exception of snowmobile and ATV's (above) and major changes in land use (building, timber removal, etc.)

This management plan and attached management map is approved as a part of the agreement between the Scientific Areas Preservation Council and Bureau Parks & Recreation owners or administrators of Natural Bridge and Rockshelter scientific area.

For the Council: _____
Chairman Henry Kolka

For owner or administering agency: _____

Secretary Cy Kabat

Date: _____

Date: _____

12/13/68
nd

Species List - Rockshelter Woods

September 9, 1971

1. Cliffs and prairie - NE 1/4 NW 1/4 Section 17

Andropogon scoparius - Little Bluestem
Aquilegia canadensis - Columbine
Amorpha canescens - Leadplant
Arabis lyrata - Rock Cress
Arenaria stricta - Stiff Sandwort
Asclepias verticillata - Whorled Milkweed
Aster laevis - Smooth Blue Aster
Bouteloua curtipendula - Side Oats Grama
B. hirsuta - Hairy Grama
Celastrus scandens - Climbing Bittersweet
Ceanothus americana - New Jersey Tea
Hedeoma hispida - Rough Pennyroyal
Juniperus communis var. *depressa* - Common Juniper
J. virginiana - Red Cedar
Monarda punctata var. *villicaulis* - Horse Mint
Opuntia compressa - Prickly Pear
Pellaea glabella - Smooth Cliff-brake
Petalostemum purpureum - Purple Prairie Clover
Poa compressa - Canada Blue Grass
Solidago nemoralis - Old field Goldenrod
Solidago sciaphila - Cliff Goldenrod - Endemic in Wisconsin Driftless Area
Sorghastrum nutans - Indian Grass

2. Woodland NE 1/4 NW 1/4 Section 17 - Mixed Upland hardwood forest on sandy soil. *Quercus alba* is the most common, with *Tilia americana*, *Juglans cinera*, *Quercus velutina* and *Ulmus rubra*. Also *Carya ovata* and *C. cordiformis*, *Acer rubrum* and *A. saccharum*, and *Ostrya virginiana*.

Actaea alba - White Baneberry
A. rubra - Red Baneberry
Adiantum pedatum - Maidenhair Fern
Amphicarpa bracteata - Hog Peanut
Arabis canadensis - Sickle Pod
Aralia nudicaulis - Wild Sarsaparilla
A. racemosa - Spikenard
Asarum canadense - Wild Ginger
Aster lateriflorus - Side-flowering Aster
A. sagittifolius - Arrow-leafed Aster
Athyrium felix-femina - Lady Fern
Botrychium virginianum - Rattlesnake Fern
Campanula rotundifolia - Harebell
Camptosorus rhizophyllus - Walking Fern
Chilanthus feei - Slender Lip-fern- on vertical sandstone cliffs
Circaea quadrisulcata - Enchanters Nightshade
Cornus alternifolia - Alternate-leaved Dogwood
C. rugosa - Round-leaved Dogwood - approaching the southern edge of its range
in Wisconsin
Cryptotaenia canadensis - Honewort
Cystopteris bulbifera - Bulblet Fern- sandstone cliffs and at their base,
Danthonia spicata - Poverty Oat Grass in shade
Desmodium acuminatum - Pointed Tick Trefoil
D. Dilleni - Tick-trefoil - uncommon in Wisconsin

2. Woodland (Cont.)

- Equisetum hyemale var. affine - Tall Scouring Rush
- Eupatorium rugosum - White Snakeroot
- Galium aparine - Bedstraw
- Geum canadense - Wood Avens
- Goodyera pubescens - Rattlesnake Plantain
- Hackelia virginiana - Stickseed
- Hamamelis virginiana - Witch Hazel
- Hepatica acutiloba - Sharp-lobed Hepatica
- Hystrix patula - Bottlebrush Grass
- Lathyrus ochroleucus - Pale Vetchling
- Lysimachia quadrifolia - Whorled Loosestrife
- Menispermum canadense - Moonseed
- Monarda fistulosa - Wild Bergamot
- Monotropa Uniflora - Indian Pipe
- Oryzopsis racemosa - Black-seeded Rice Grass
- Osmorhiza Claytoni - Hairy Sweet Cicely
- Osmunda Claytoni - Interrupted Fern
- Panicum latifolium - Broad-leaved Panic Grass
- Pellaea atropurpurea - Purple Cliff-brake - found only in the Driftless Area,
an endemic. Cliffs
- Pellaea glabella - Smooth Cliff-brake - on sandstone cliffs
- Phryma leptostachya - Lopseed
- Pilea pumila - Clearweed
- Prenanthes alba - Lion's Foot
- Prunella vulgaris var. lanceolata - Self Heal
- Rhus radicans - Poison Ivy
- Rubus occidentalis - Black Raspberry
- Rubus sp. - Blackberry
- Sanguinaria canadensis - Bloodroot
- Sanicula marilandica - Sanicle Black Snakeroot
- Smilacina racemosa - Feathery False Solomon's Seal
- Smilax hispida - Bristly Green Brier
- S. lasioneura - Common Carrion Flower
- Solidago flexicaulis - Broad-leaved Goldenrod
- Thalictrum dioicum - Early Meadow Rue
- Uvularia grandiflora - Bellwort
- Veronicastrum virginicum - Culver's Root
- Viburnum acerifolium - Maple-leaved Viburnum
- V. Rafinesquianum - Arrow-wood
- Xanthoxylum americanum - Prickly Ash

3. Cliffs and Prairie Remnant - SE 1/4 NE 1/4 17

- Amorpha canescens - Leadplant
- Andropogon gerardi - Big Bluestem
- A. scoparius - Little Bluestem
- Arenaria stricta - Stiff Sandwort
- Asclepias verticillata - Whorled Milkweed
- Aster laevis - Smooth Blue Aster
- A. oblongifolius - Aromatic Aster
- A. sericeus - Silky Aster

Boutebua curtispindula - Side-oats Grama
B. hirsuta - Hairy Grama
Chilanthus feei - Slender Lip-fern
Commandra Richardsiana - Toadflax
Coreopsis palmata - Prairie Coreopsis
Euphorbia corollata - Flowering Spurge
Koeleria cristata - June Grass
Kuhnia eupatorioides - False Boneset
Lithospermum croceum - Hairy Puccoon
Opuntia compressa - Prickly Pear
Pellaea glabella - Smooth Cliff-brake
Petalostemum purpureum - Purple Prairie Clover
Poa compressa - Canada Blue Grass
Rudbeckia (subtomentosa)? Sweet Black-eyed Susan
Salix humilis - Prairie willow
Sorghastrum nutans - Indian Grass
Sporobolus cryptandrus - Sand Dropseed

Woody Vegetation, above and below cliffs

Quercus alba - White Oak
Q. macrocarpa - Bur Oak
Q. rubra - Red Oak
Q. velutina - Black Oak
Rhus glabra - Smooth Sumac

